

# SCIENCE

## *And Technology Program*



Theme Area: Water Resources

Program Area: Lower Colorado Region

Project No.: WR00.21

Project Title: Use of an Integrated Modeling Environment to Facilitate Integration of Surface Water and Ground Water Models.

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**Abstract:** This study is designed to explore and develop a means of automating data exchange and integration of groundwater and surface water models. The groundwater model CVGSM will be inserted into the Central Valley Project Integrated Modeling Environment (CVPrime), and the corresponding data sets will be parsed into the CVPrime database. Once this step is completed, the investigators will begin to research methods to optimize the transfer/translation of data to/from the groundwater models and surface water models. An ideal result would to develop a system wherein one modeler is able to complete both the surface water and groundwater portions of a study analysis without ever having to exit the CVPrime. This will result in improved modeling efficiency and will also increase the modelers' understanding of the physical system by providing a framework within which modelers can explore the reactions of systems that they are unfamiliar with.